

# ***Barnstable Town Council***

## ***Update on Wastewater Efforts In Barnstable***

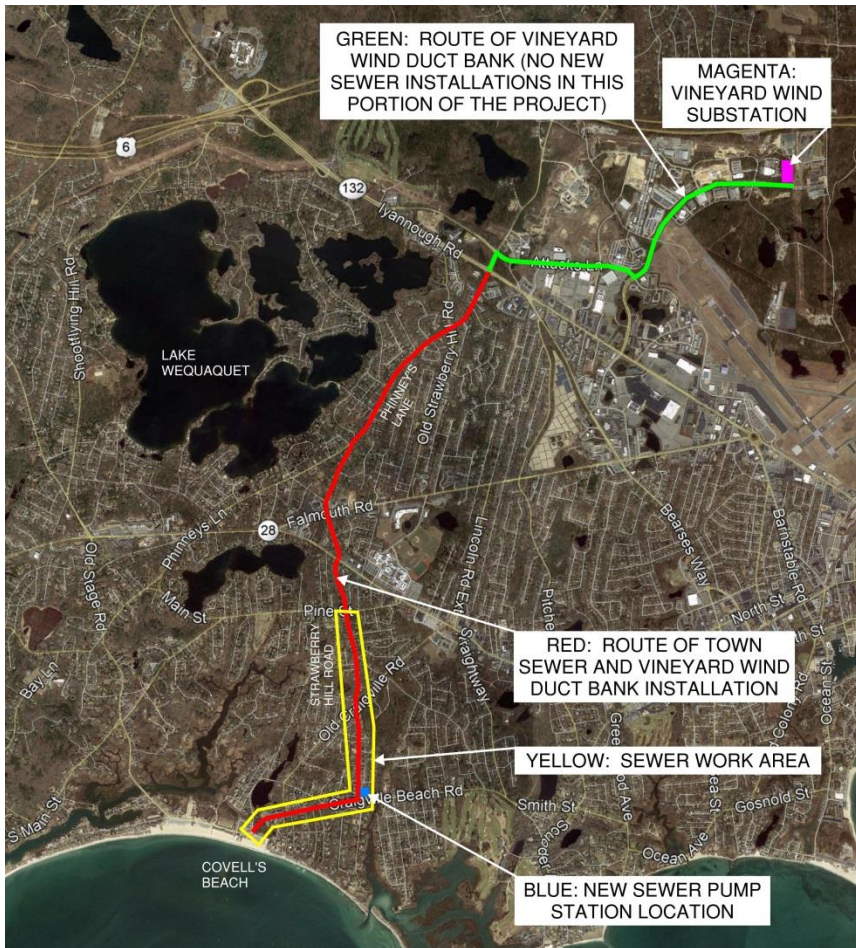
Department of Public Works  
December 16, 2021



# Project Updates Since November



## • Strawberry Hill Road Sewer Expansion Project

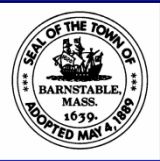


- 2,200 LF of gravity sewer main installed to date
  - SHR from PS to Old Craigville Road.
  - CBR from Lake Elizabeth Drive to Magnolia Drive
- Two sewer crews now. Third mobilizing in next few weeks.
  - Crew 1: Strawberry Hill Road
  - Crew 2: Craigville Beach Road
  - Crew 3: Force main and services on SHR
- Vineyard Wind's crews at Covell's Beach Parking Lot and on Independence Drive.
- Project anticipated to be completed in Spring, 2023

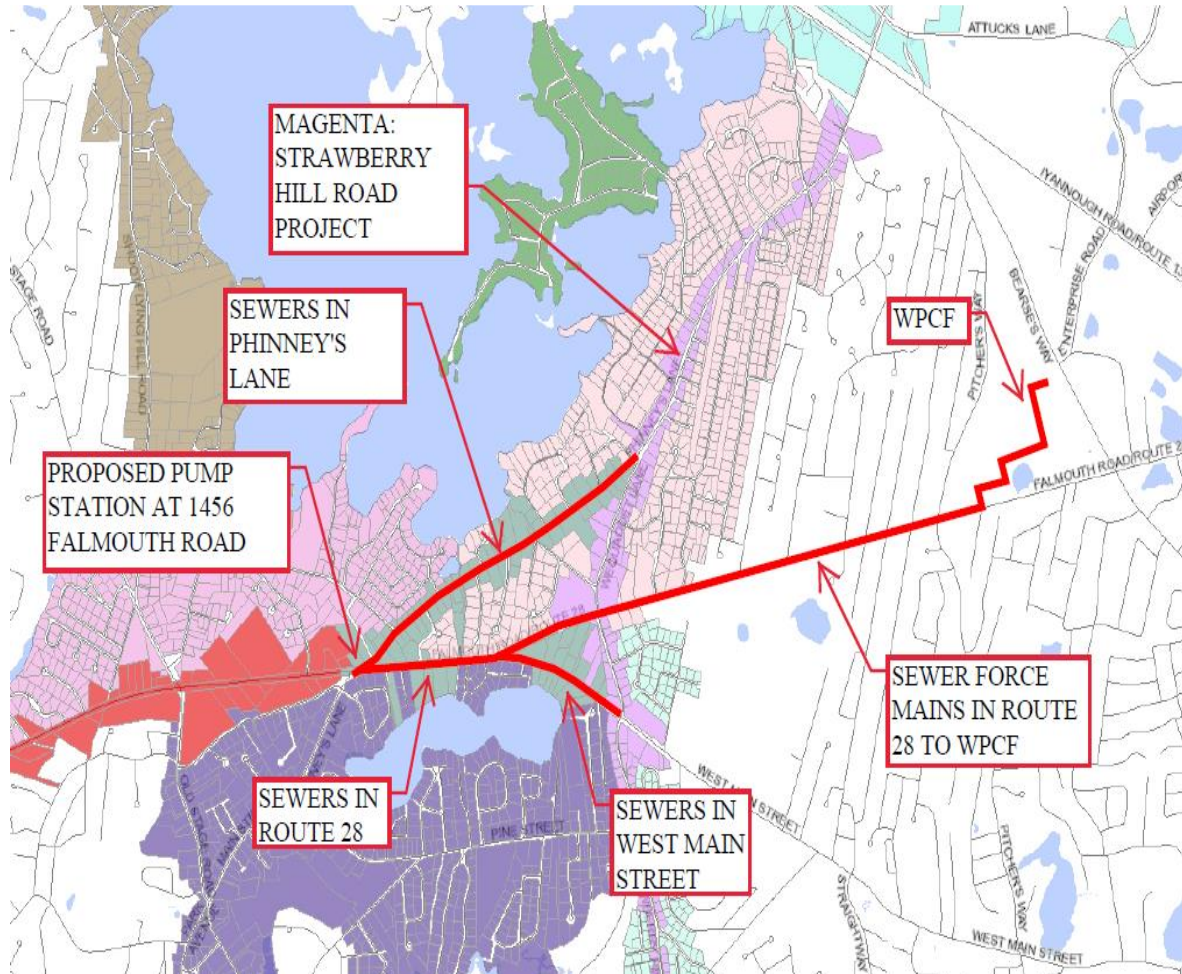




# Project Updates Since November



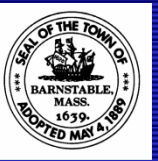
## • *Route 28 East Sewer Expansion Project*



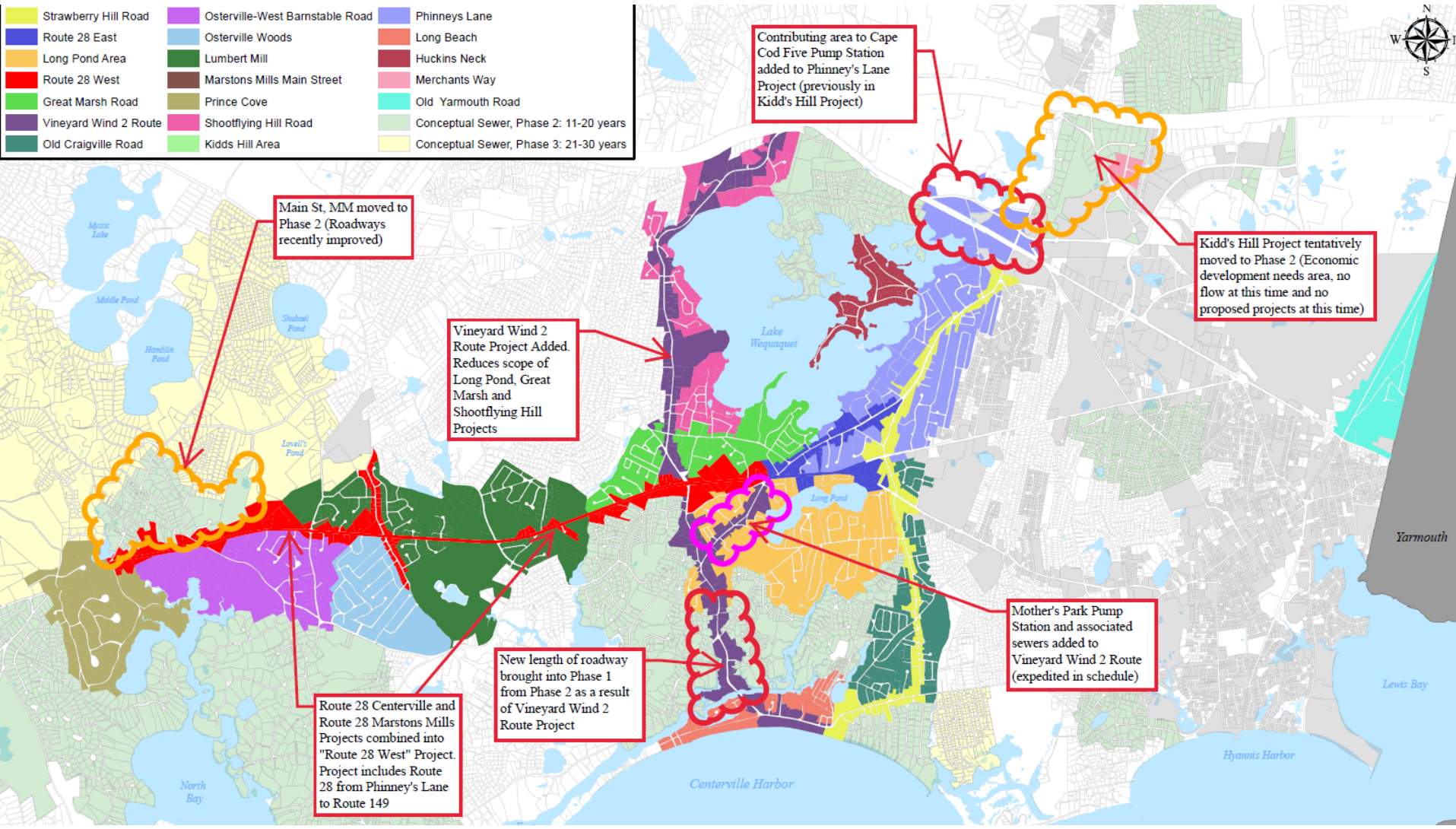
- *SRF Loan Application Submitted*
- *Design and permitting continues*
- *Virtual informational session held on 11/16/21*
- *Potential easement acquisition on abutting property (195 Phinney's Ln)*
- *Bidding anticipated this winter*
- *Construction to commence late spring/summer*



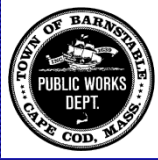
# Project Updates Since November



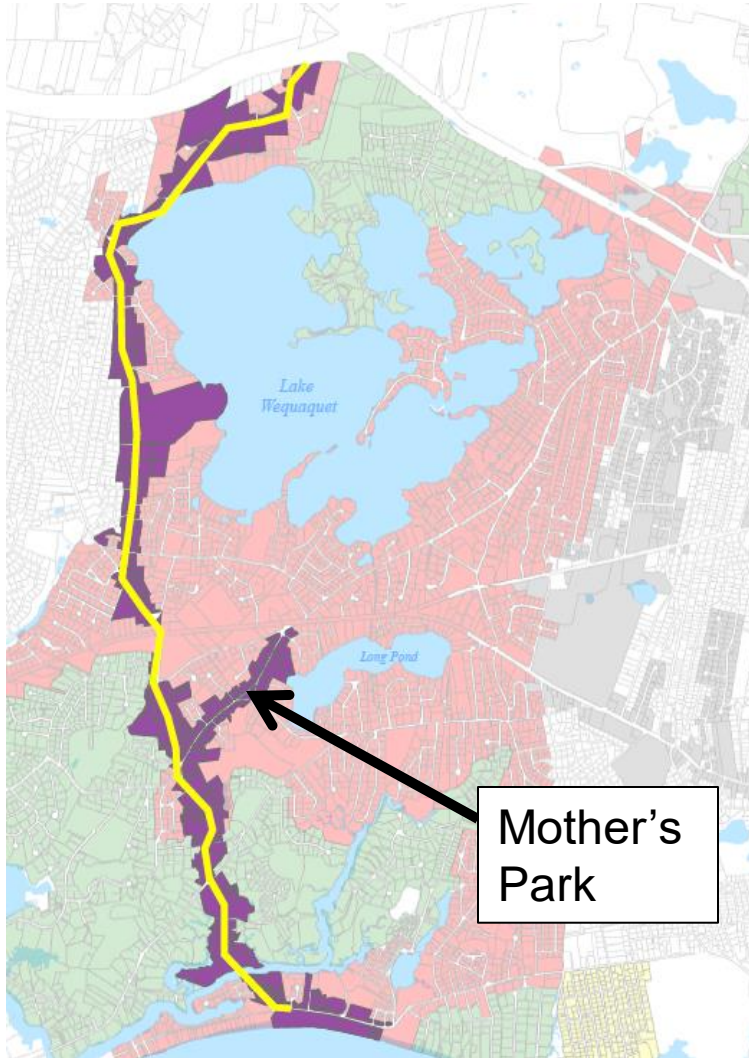
## • Adaptive Management Updates to Phase 1







# *Project Updates Since November*

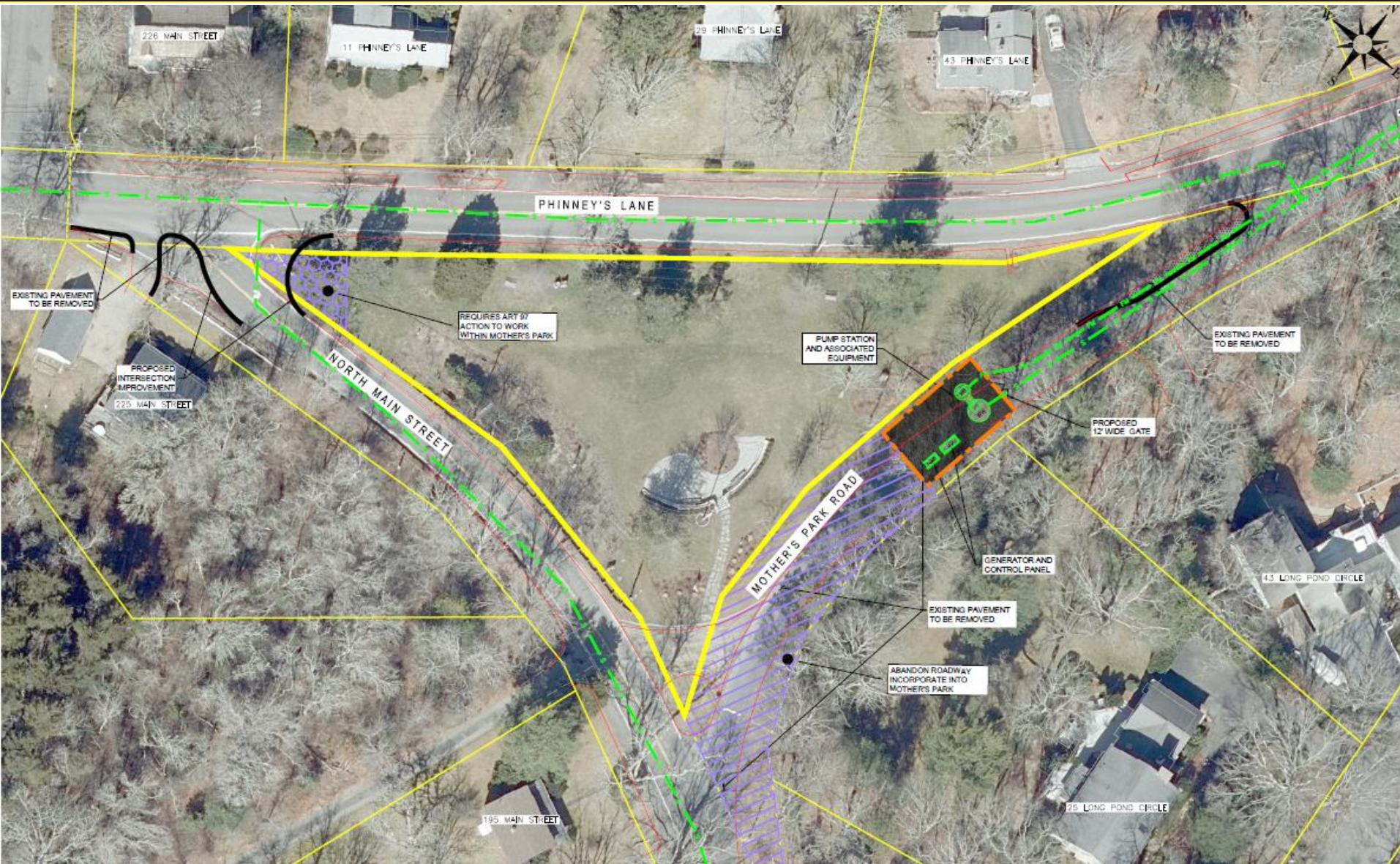
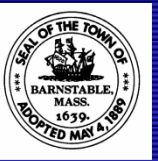


- *“Vineyard Wind 2”  
On-Shore Route*
  - *Route is located in roads requiring sewer*
  - *Second read this evening for funds to design sewers along route (2022-044)*
  - *Project includes Mother’s Park Area Pump Station and associated sewers*
    - *Virtual informational session held last night on Mother’s Park Area pump station proposal.*





# Project Updates Since November







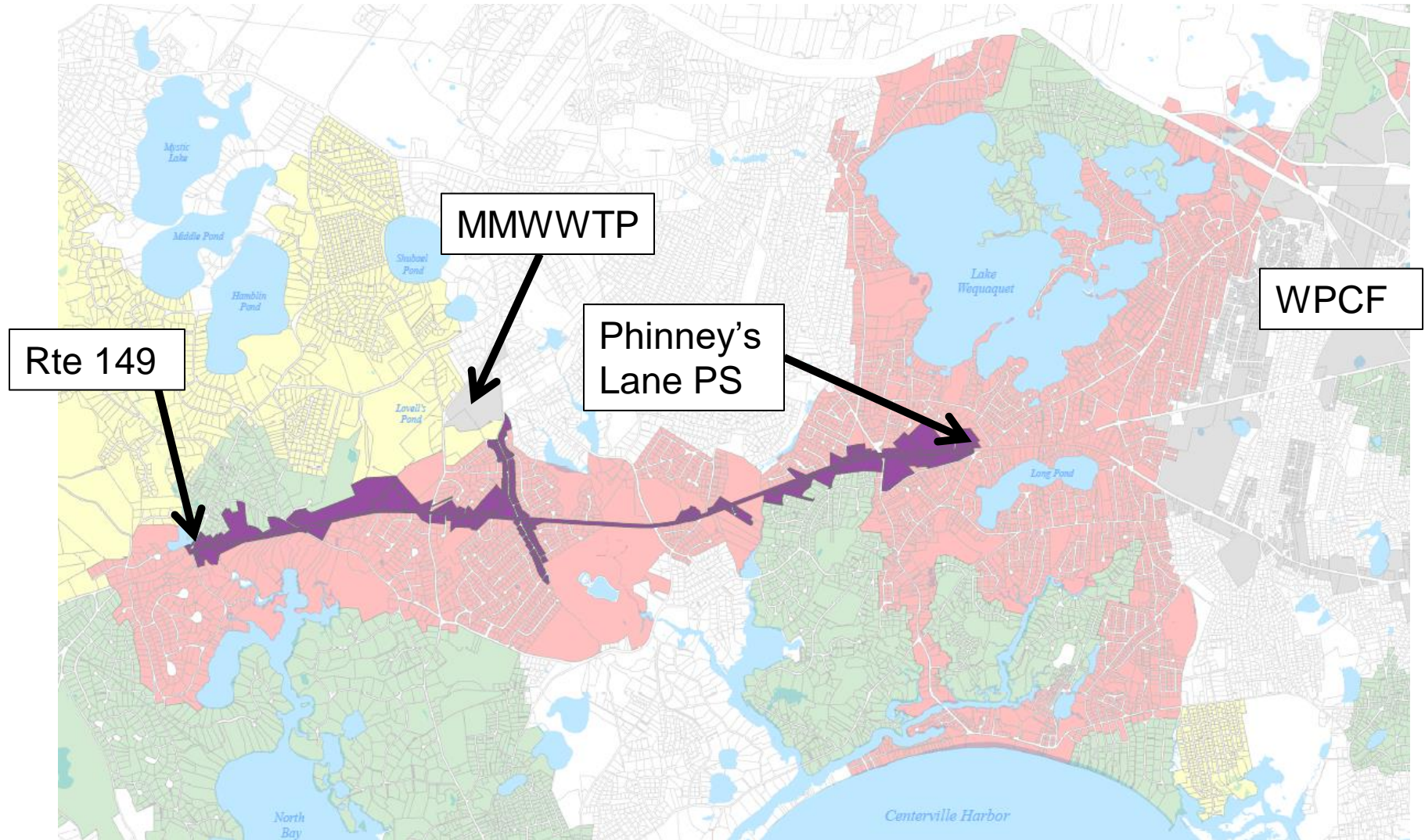
# *Project Updates Since November*



- *Route 28 “West” Sewer Expansion*
  - *Phinney’s Lane to Route 149*
  - *Previously 2 projects (Route 28 Centerville & Route 28 Marstons Mills)*
  - *Necessary infrastructure for sewer expansion into Three Bays Watershed*
  - *Includes conversion of MMWWTP into pump station.*
  - *Survey has been completed*
  - *Second read this evening for design funds (2022-045).*



# ***Project Updates Since November***



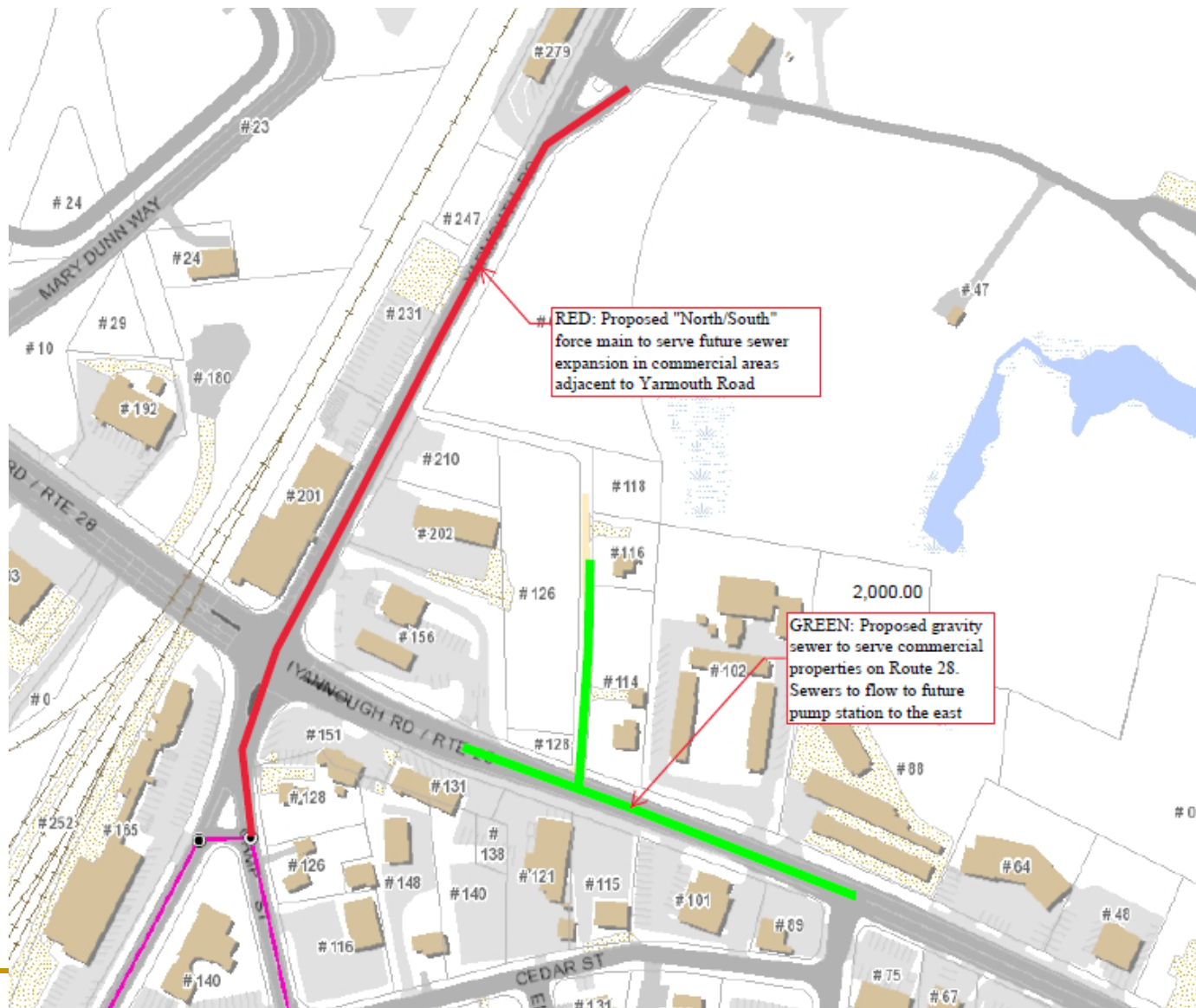




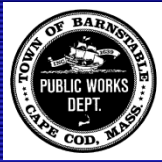
# *Project Updates Since November*



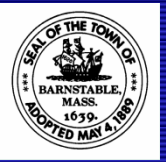
- *Route 28/ Yarmouth Road – MassDOT*
  - *Install sewers w/in project limits to support future sewer expansion.*
  - *Sewer bids far exceed engineer's estimate provided by MassDOT.*
  - *Second read this evening for supplemental appropriation (2022-052)*
  - *Work anticipated to commence in spring 2022.*
    - *Northern Construction is MassDOT's contractor.*







# *Project Updates Since November*



- *Planning on-going for other Sewer Projects*
  - *Phinney's Lane and Long Pond Sewer Projects*
    - *Surveys complete, preliminary design (in-house) on-going.*
    - *First projects involving Private Roads.*



# *Project Updates Since November*



- *WPCF Updates*
  - *Evaluation of Nitrogen Removal Improvements*
    - *Contract awarded to Wright-Pierce*
    - *Evaluation to be completed by Spring of 2022*
  - *Effluent Disposal Evaluation*
    - *CDM Smith will be conducting refined modeling evaluation of identified options*
  - *Solids Processing Facility Upgrades*
    - *Construction on-going*
  - *WPCF Engineering Facility Study*
    - *DEP required for permit renewal in 2023.*
    - *Proposals being sought.*



# *Project Updates Since November*



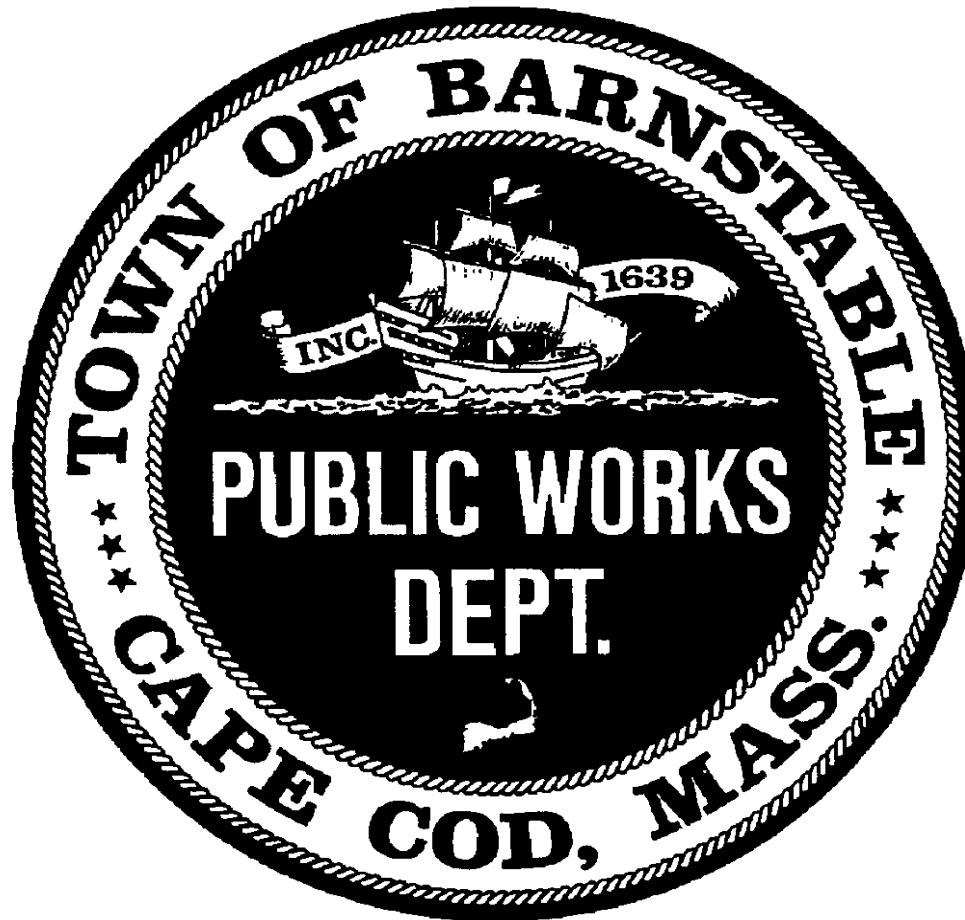
- *SRF*
  - *Loan applications for 2021 projects being reviewed by SRF*
    - *Route 28 East Sewer Expansion Project*
    - *Freezer Road Sewer Pump Station Rehabilitation*
  - *Project Evaluation Forms for 2022 projects being reviewed by SRF*
    - *720 Main St Pump Station Replacement*
    - *Old Colony Pump Station Rehabilitation*
    - *I/I Program Implementation*
- *JBCC*
  - *Negotiations continue*







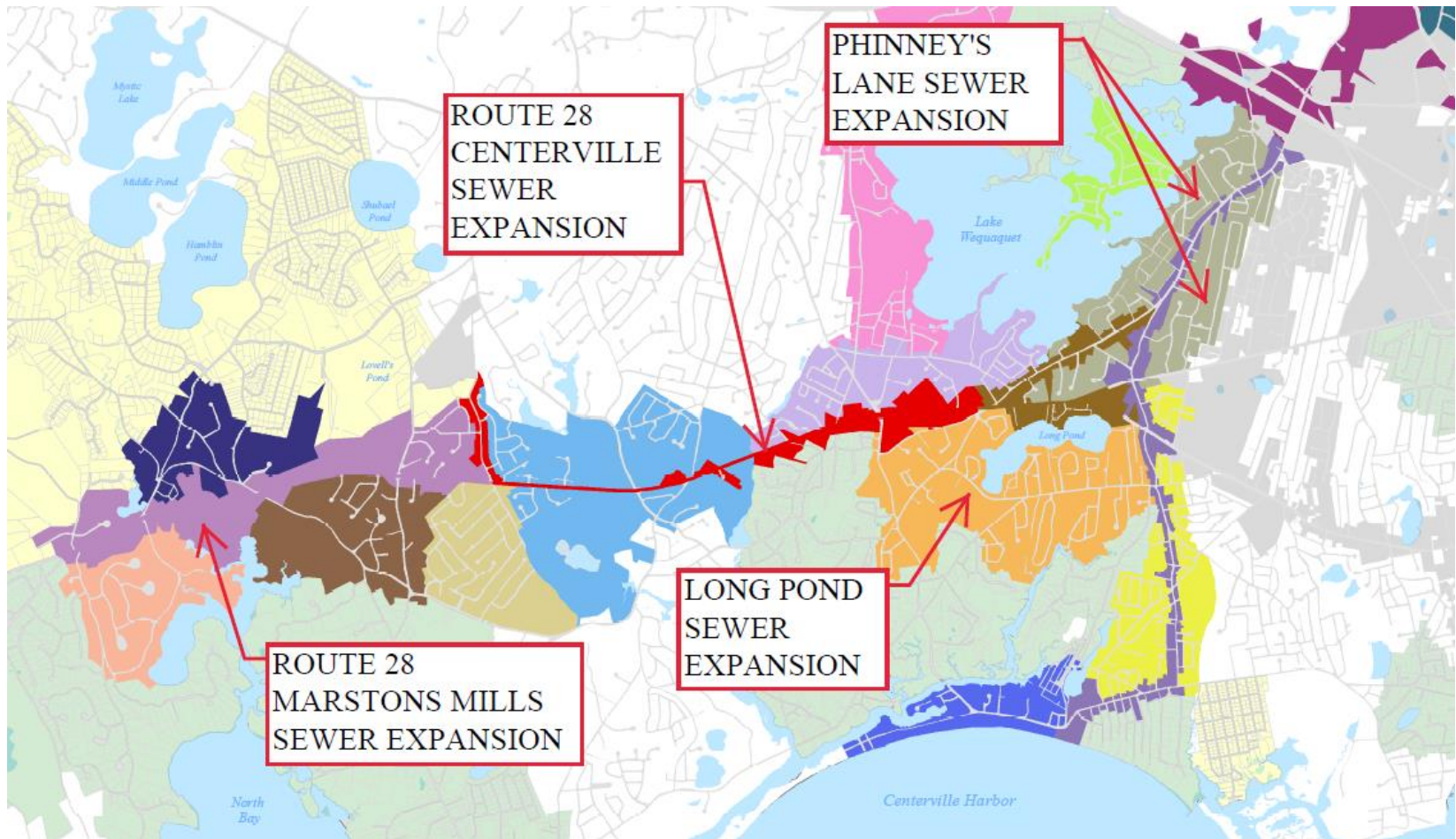
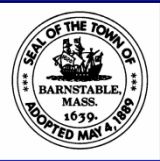
# *Discussion?*







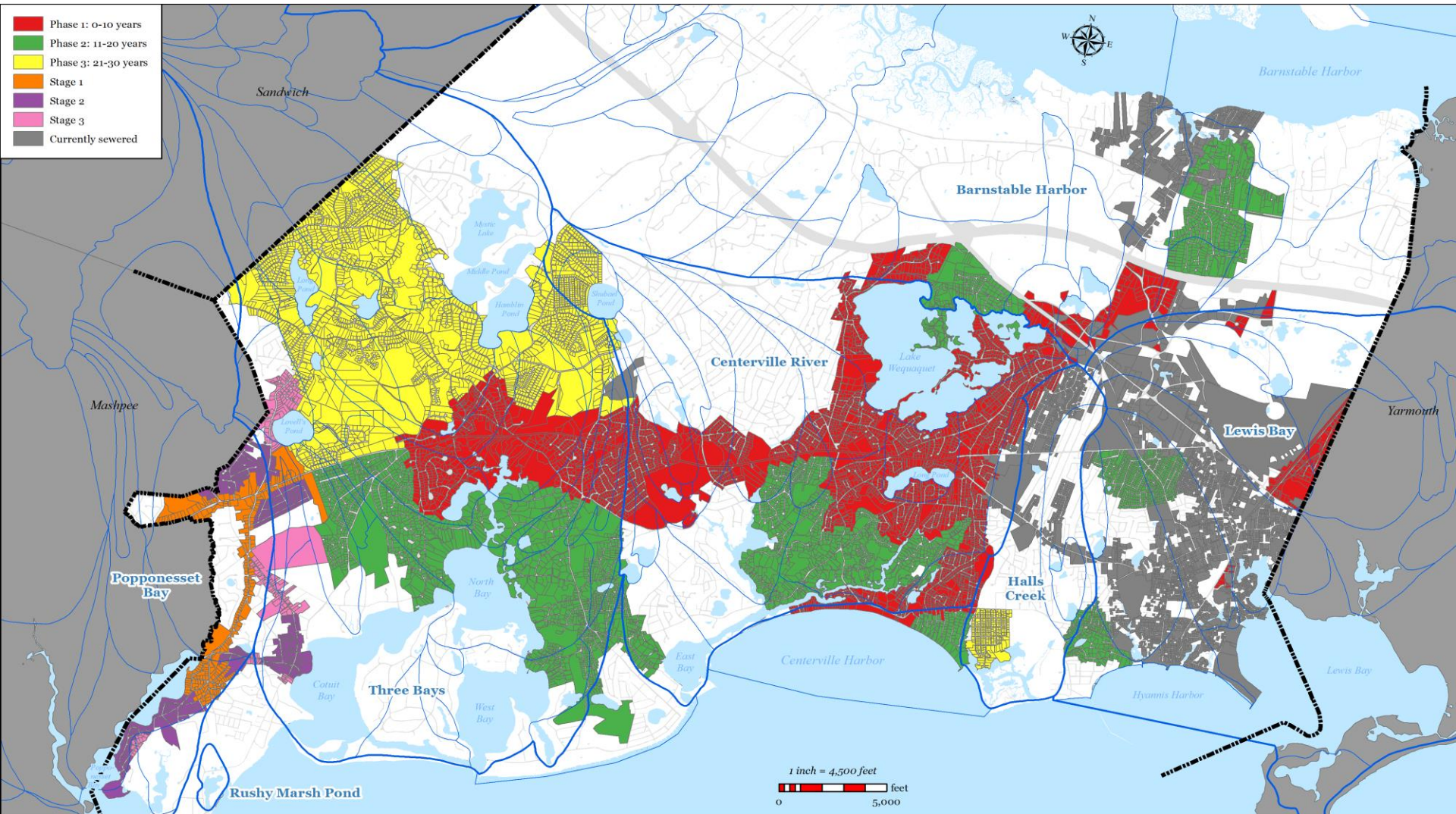
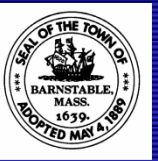
# Project Updates Since October







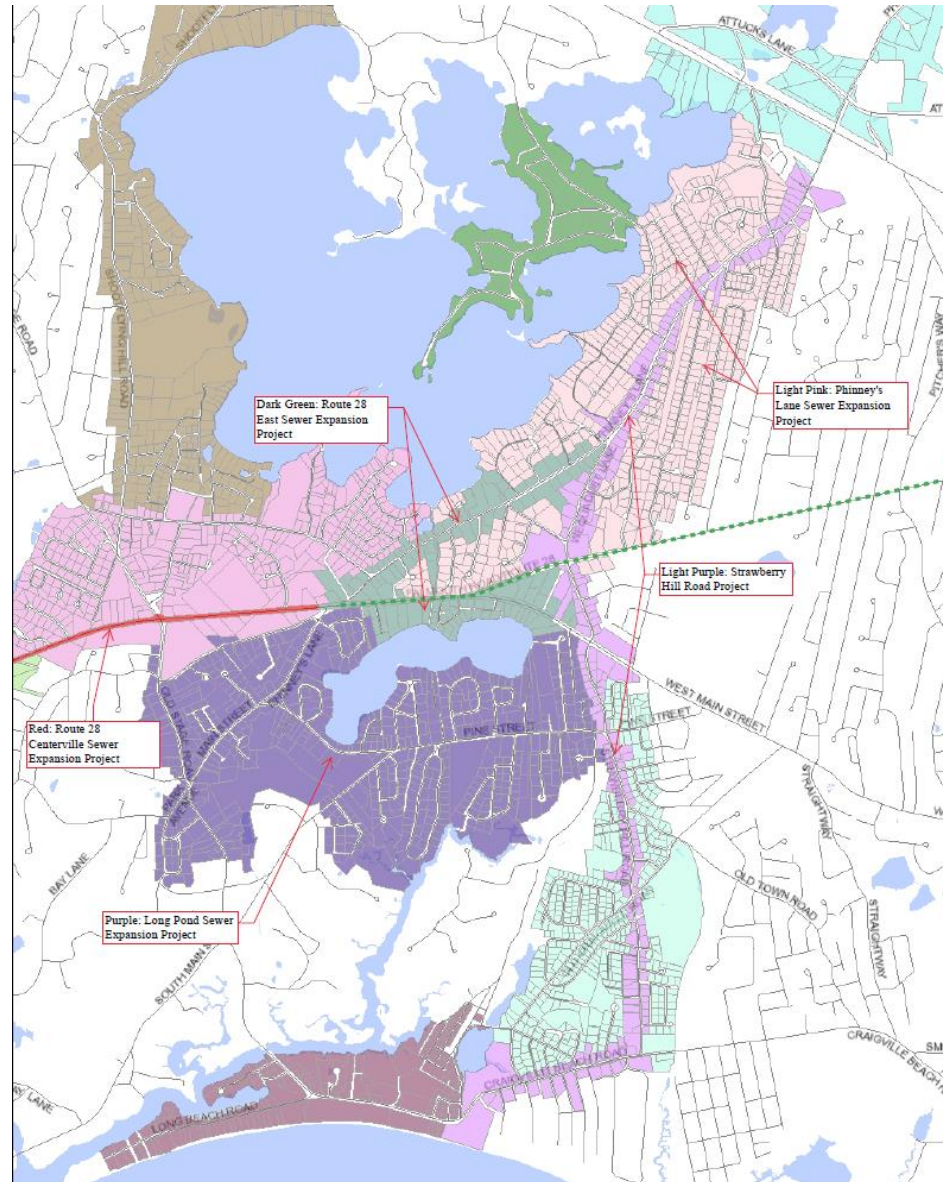
# Phasing Plan







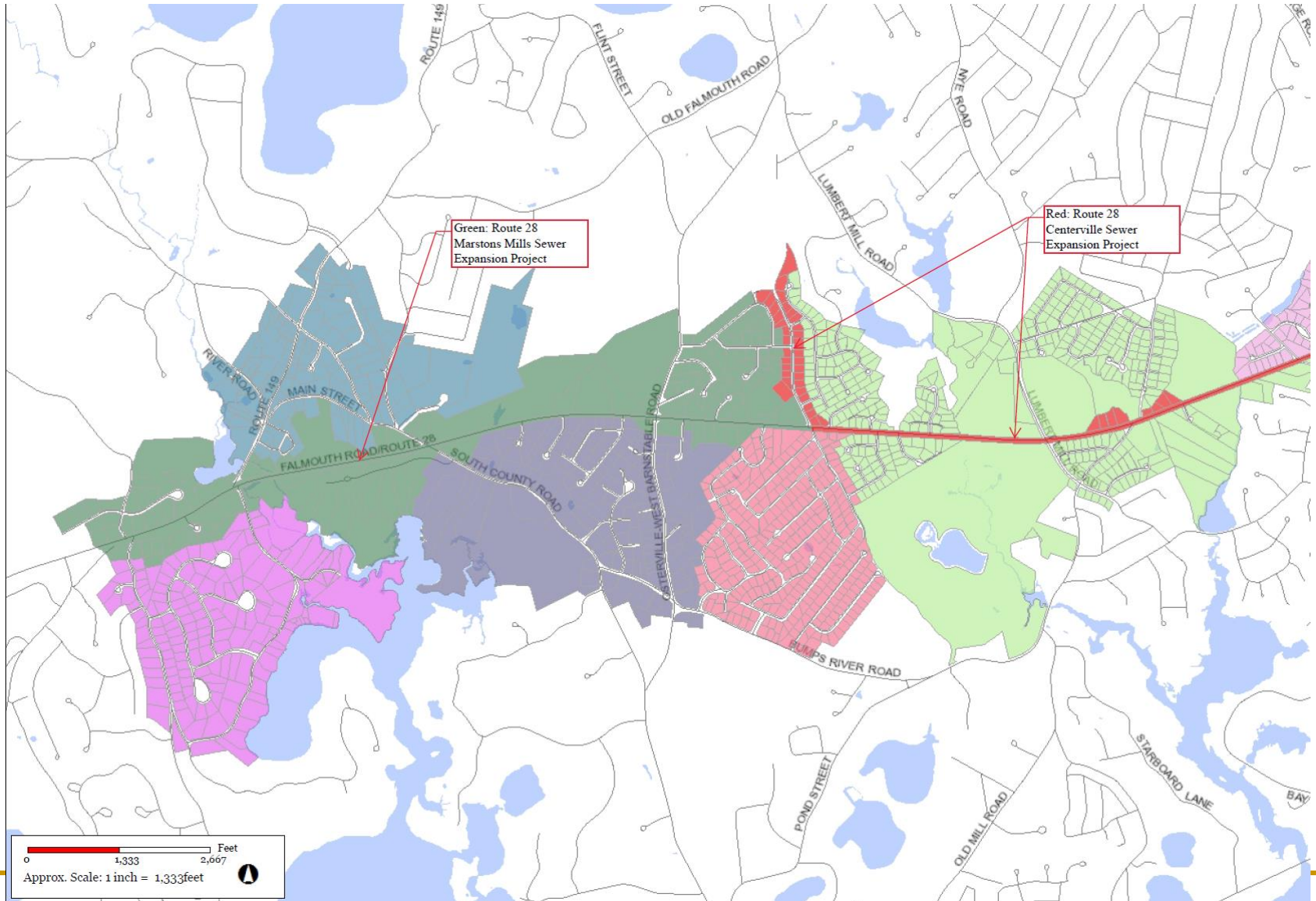
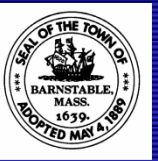
# Phase I Projects - East







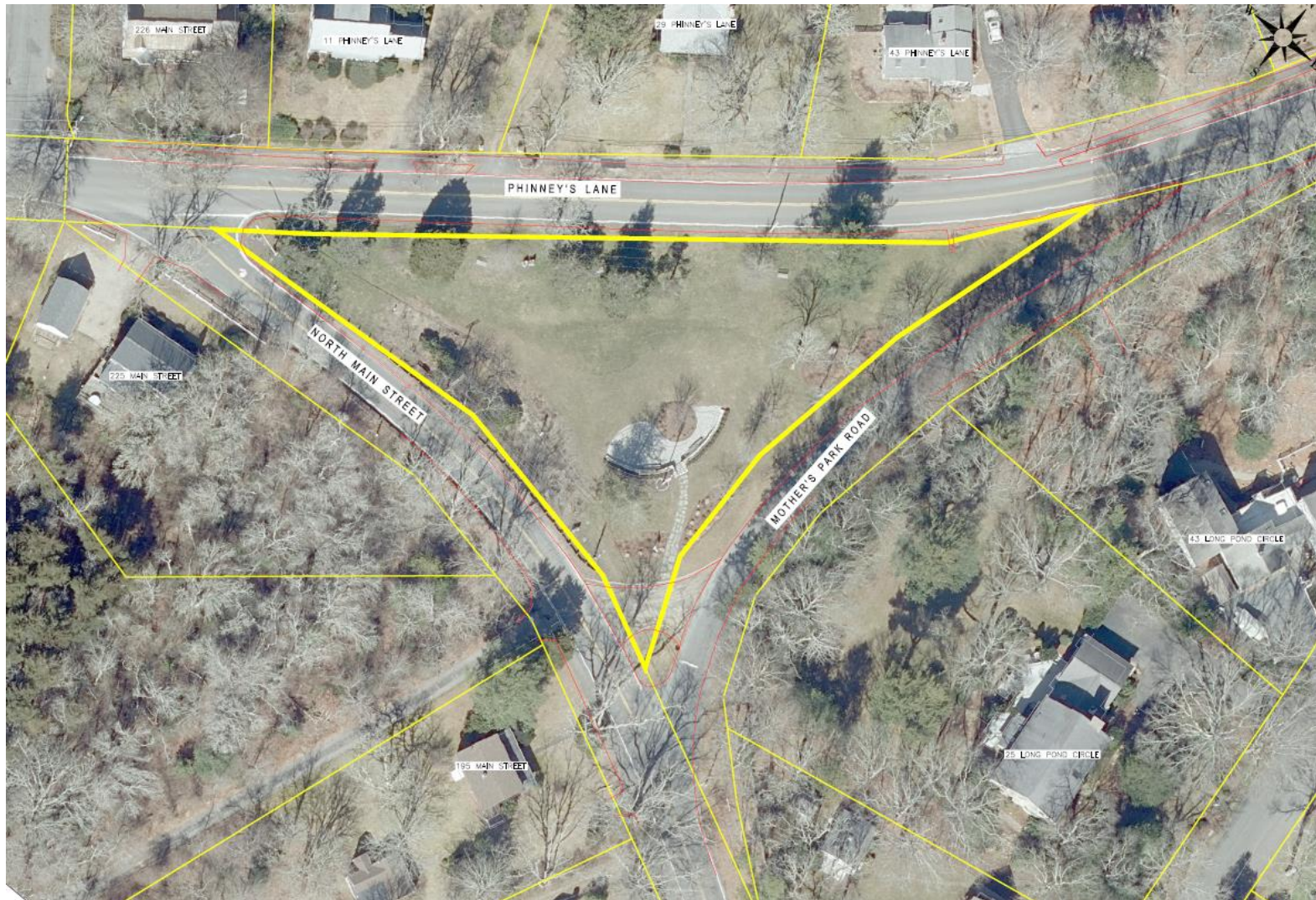
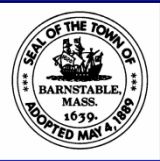
# Phase I Projects - West







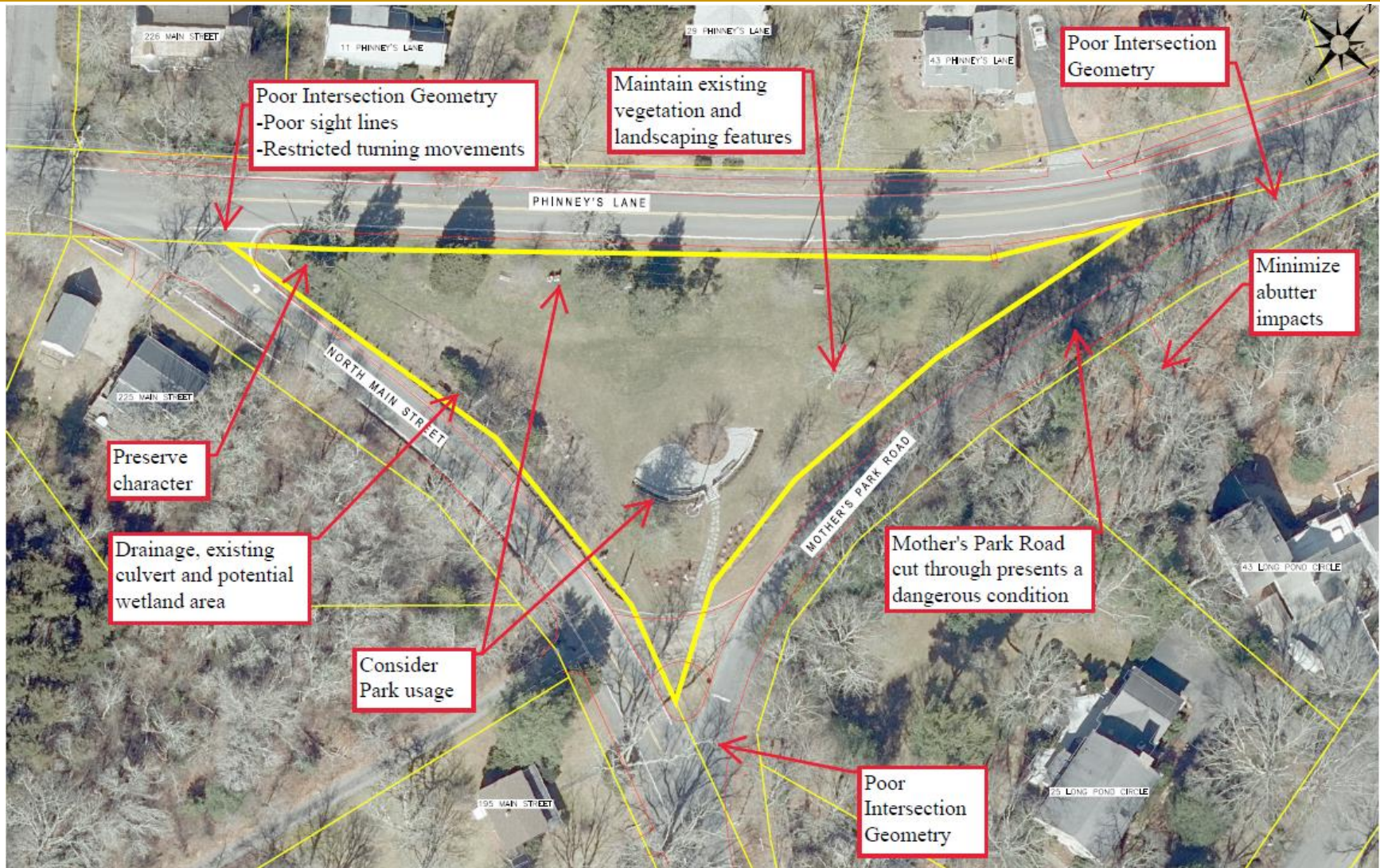
# Mother's Park Existing Conditions







# Key Considerations







# *Existing Conditions*







# ***Proposed Conditions***







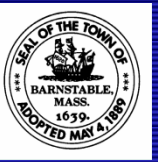
# *Existing Conditions*



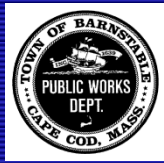




# *Proposed Conditions*







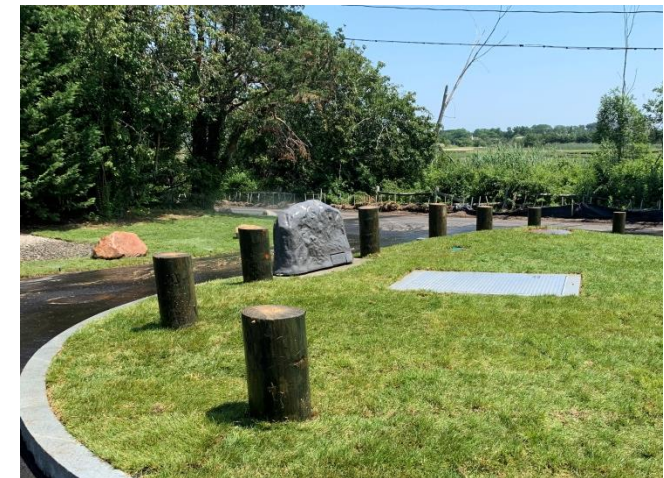
# ***Proposed Conditions w/ Potential Landscaping***



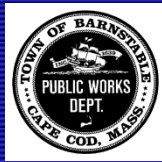




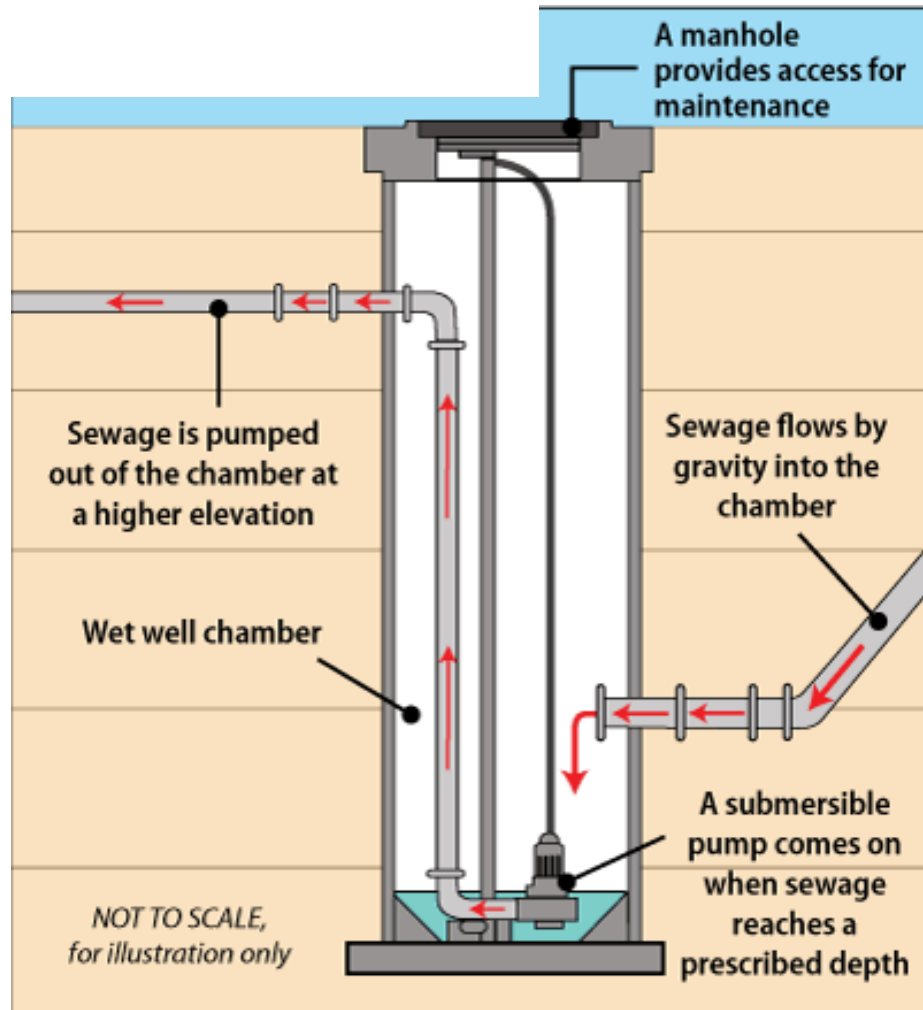
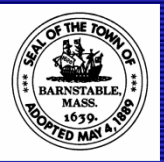
# ***Similar Pump Station Recently Installed on Rendezvous Lane in Barnstable Village***







# How a Submersible Sewer Pump Station Functions





# Pump Station Operations



- Crews required to visit the pump station once a day
  - Visits will be in a Town pickup truck and consist of visual inspection
  - Pump station monitored remotely
- Maintenance required at times to fix old/failing components.
- Generators are automatically exercised once a week for 15 minutes
- Odors and noise are generally not an issue for submersible pump stations when properly functioning
  - Equipment well below grade
- Landscaping is maintained by Town crews.

